

DIGITAL DESIGN (DIGD)

DIGD 3XX: Web Design Elective**Credits:** 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Studio**DIGD 103: Principles of User Experience**

The purpose of this new course is to create an essential understanding of the User Experience (UX) design process which is a key component to becoming an Interactive Designer. This course, which is the first core-course in the newly revised Interactive Design & Development program will serve to give students an understanding of design workflow, developing sitemaps & navigation, information architecture, storyboarding, wireframes, prototyping, feature definition, documentation, and user-testing. This skill set is a fundamental requirement which will continue to be reinforced and utilized throughout all of their courses in the program.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Studio**DIGD 200: Fundamentals of Web Programming**

The purpose of this new course is to create an essential understanding of the HTML and CSS markup languages which is a key component to becoming an Interactive Designer. This course, which is a sophomore level core course in the newly revised Interactive Design & Development program will serve to give students a comprehensive understanding of how to produce functional web pages using HTML and CSS. Additionally, they will be instructed on how to debug their code, validate code, and cross-browser/device check for integrity across all platforms. These skills are a fundamental requirement which will continue to be reinforced and utilized throughout all of their courses in the program.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Lecture/Online/Studio, Lecture/Studio Combination, Studio**DIGD 206: Found in Web Design & Strategy**

This course will be an exploration into the design process and techniques for creating interactive experiences. This will be first step in learning to think and work as a web designer. We will cover a basic understanding of information architecture, usability, front end programming logic, and design literacy. We will also discuss the principles of raster and vector electronic imaging as a means to provide a solid foundation needed to succeed in the digital design field.

Credits: 3**College:** School of Design & Engineering**Prerequisites:** ARFD 102 or DSGF 203 or GRPH 102 [Min Grade: D]**Schedule Type:** Lecture, Lecture/Studio Combination, Studio**DIGD 305: Theory of Electr Comm Sem I**

(writing intensive) This seminar course provides students with a theoretical understanding of the role of the digital designer within the constantly evolving electronic marketplace. Issues of e-commerce, digital communication, electronic ethics and professional practice will be discussed. Special focus will be placed on how our existing culture has been, and is currently being, revolutionized by the information explosion.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture**DIGD 307: Advanced Web Design & Strategy**

This course exposes students to conceptual and technical aspects of Web design. Information architecture, semiotics, storyboarding and site management are taught; in addition to learning technical skills in Web production software and HTML. Additional areas of focus include typography, color theory, composition and motion graphics for the Web. The final project requires the publication of a Web site that pushes the boundaries of traditional interactive media.

Credits: 3**College:** School of Design & Engineering**Prerequisites:** DIGD 206 [Min Grade: C]**Schedule Type:** Lecture, Lecture/Studio Combination, Studio**DIGD 314: User Interface Design**

This course provides students with a general introduction to the theory and practice of creating 2D graphical user interfaces. Students will explore the various components of user interface design for a wide range of basic interaction devices available. Emphasis will be put on usability and design standards. The course will cover effective layouts, best practices for navigation, search, registration/account management, and shopping carts. The final project requires a complete design series of a web-based or mobile application of the student's choosing.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Studio**DIGD 316: Web Performance & Optimizatr**

Creating effective user experience means having a comprehensive understanding of performance and optimization for internet based technologies. Students will learn how to effectively maintain their own webserver, address performance related issues, optimize delivery of web-based content, debug scripting errors, and optimize delivery across desktop, tablet, and mobile platforms including cross-browser testing.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** By Appointment, Studio**DIGD 318: Media Production**

This course exposes students to principles of basic digital photography, audio editing, and digital video design and production. Students will become versed in non-linear, video-editing software as a means to create effective digital media presentations. A series of projects develop essential skill sets such as storyboarding, basic photography & composition, audio/video capture, and editing

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Lecture/Studio Combination, On-Line, Studio**DIGD 320: Javascript Programming**

This course will explore the ways in which JavaScript can be applied to websites to develop greater interaction with users, aid in design, and create better user experiences overall. Students will work with libraries like jQuery as well as many other plugins and extensions that aid in the development of web applications and websites. This will include using third party API's (Application Programming Interfaces) to retrieve and manipulate JSON objects to help users interpret data. This course will consist of several small projects leading to a final project at the end of the semester. Prerequisite: DIGD-307

Credits: 3**College:** School of Design & Engineering**Schedule Type:** By Appointment, Lecture, Lecture/Studio Combination, Studio

DIGD 370: Portfolio Development Seminar

This course provides students with an active and deep survey of constructing an effective design portfolio through various means including: print, electronic PDF, community websites, and independent websites. Students will also develop resume & portfolio and participate in presentation and interviewing exercises. This course is recommended for design students in their junior year seeking internship and seniors seeking professional employment following graduation.

Credits: 1**College:** School of Design & Engineering**Schedule Type:** On-Line, Studio**DIGD 403: Web Development**

This course will explore the Web markup languages, HTML, CSS and Java Script, required for advanced control of Web design. Students will be introduced to these languages through lectures, demonstrations and practical exercises. The focus will be on writing, testing and debugging the code and its appropriate application. A series of increasingly complex exercises will gradually build the student's knowledge and understanding of these languages.

Credits: 3**College:** School of Design & Engineering**Prerequisites:** DIGD 206 [Min Grade: C]**Schedule Type:** By Appointment - 1 student, Lecture**DIGD 415: 3-D Modeling**

This course exposes students to the conceptual and technical aspects of three-dimensional modeling, animation, and virtual environments. Students will complete a series of specifically designed exercises of increasing difficulty leading to a final project of the student's choosing. The class will cover the basic principles of 3D modeling and animation including polygonal modeling, texturing, lighting and animation. An emphasis will be placed on clear and concise communication of information and ideas expressed through a visual medium.

Credits: 3**College:** School of Design & Engineering**Prerequisites:** DIGD 206 [Min Grade: D]**Schedule Type:** Lecture, Studio**DIGD 417: Content Mgmt Sys & E-Commerce**

This course introduces students to a wide variety of content management systems (CMS) that have become commonplace in the web design industry. Students will be introduced to best development practices and system architecture among several popular platforms. Additionally, advanced topics such as e-commerce platforms and application development will be explored. This course will include a series of progressively more difficult and technically complex projects leading toward a larger and more in depth final project. Prerequisite : DIGD-403.

Credits: 3**College:** School of Design & Engineering**Schedule Type:** Lecture, Studio**DIGD 498: Interdisc Capstone Proj Prep**

(writing intensive) This course requires students to identify and analyze potential capstone projects through a number of lenses including technical feasibility, marketability and design potential. With faculty guidance, students will form interdisciplinary teams that reflect the specific requirements of the chosen capstone project. To complete this course, a project proposal must be submitted documenting the factors that will allow the development of a successful capstone project. Research and presentation skills are a major focus of this course.

Credits: 3**College:** School of Design & Engineering**Prerequisites:** DIGD 314 or DIGD 3114 [Min Grade: C]**Schedule Type:** Lecture**DIGD 499: Interactive Design IV Capstone**

This capstone studio will develop the ability of the digital designer to successfully participate on an interdisciplinary team. Students from a variety of majors, already organized in the capstone preparation course, will collaborate to develop a final, working prototype of a product, service, experience or publication of their choice that synthesizes their knowledge and skills from the previous semesters. The students will develop a project that demonstrates innovation, marketability and relevance within the larger community.

Credits: 6**College:** School of Design & Engineering**Prerequisites:** DIGD 498 [Min Grade: B-]**Schedule Type:** By Appointment - 1 student, Studio